



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,078	06/20/2003	Kenneth Roger Jones	1033-SS00380	7047
84326 7590 11/25/2009 AT & T LEGAL DEPARTMENT - Toler ATTN: PATENT DOCKETING ROOM 2A-207 ONE AT & T WAY BEDMINISTER, NJ 07921				
EXAMINER				
SOL, ANTHONY M				
ART UNIT		PAPER NUMBER		
2465				
MAIL DATE		DELIVERY MODE		
11/25/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/601,078

Applicant(s)

JONES ET AL.

Examiner

ANTHONY SOL

Art Unit

2465

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,6-9 and 11-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,6-9 and 11-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/GS-08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date 11/6/2009

DETAILED ACTION

- Applicant's Amendment filed 7/30/2009 is acknowledged.
- Claims 1, 2, 9, and 16 have been amended.
- Claims 1, 2, 6-9, and 11-16 are now pending.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1, 2, 6-9, and 11-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Regarding claims 1, 9, and 16,

Claim 1, and similarly claims 9 and 16, recites in part:

"inquiring, from a remote location, a status of an upper-layer communication indicator indicating a transport layer communication status, the upper-layer communication indicator displayed at a modem, wherein the status is observable by a visual inspection of the upper-layer communication indicator by an end-user;

...

performing a first set of actions when the status indicates **valid** upper-layer communication; and
performing a second set of actions when the status indicates **invalid** upper-layer communication." (emphasis added)

The specification does not provide any description of the above emphasized limitations. The specification provides an enabling disclosure for only a layer 3 indicator, specifically a PPPoE indicator. The applicant has amended the claims to particularly recite an indicator indicating a transport layer communication status. The only mention of transport layer is in reference to figure 2; however, the description is only describing a well-known International Standards Organization (ISO) standard's model, consisting of seven layers (see Specification, para. [1019]). It does not describe a transport layer communication status indicator. The specification broadly describes an "upper-layer indicator" in reference to fig. 4. Again, however, there is no mention of a transport layer communication status indicator, only a layer 3 indicator, specifically a PPPoE indicator (see Specification, para. [1036]). And since the applicant has amended the claims to recite a "upper layer communication indicator indicating a transport layer communication status" to particularly distinguish from the prior art cited by the examiner (i.e., Armstrong, US 2003/0231206, in the Office action mailed 12/3/2008), an enabling disclosure describing a transport layer communication status indicator is clearly necessary as required by 35 U.S.C. 112, first paragraph.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 6-9, and 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of Pub. No. US 2003/0231206 A1 ("Armstrong") and Pub. No. US 2006/0212919 A1 ("Tsang").

Regarding claims 1, 2, 6, 9, and 16,

AAPA discloses inquiring, from a remote location, a status of an upper-layer communication indicator, the upper layer communication indicator displayed at a modem, wherein the status is observable by a visual inspection of the indicator by an end-user (see Applicant's specification, pg. 9, para. 1035, *However, in prior art systems, higher-level communications are often terminated internally to the transceiver, without indicating to the end-user if the communications were successful or not. In such systems, to determine communication status may require opening a web browser on a connect computer, logging in to the transceiver, and viewing information on communication status, for example, PPPoE authentication, via a graphical user interface (GUI). These extra steps require end-user involvement and increase troubleshooting costs* -- In other words, the service technician would remotely ask for assistance from the subscriber/customer in viewing communication status of PPPoE (an

upper-layer communication) and relaying the information to the service technician); entering the status into data storage (this step would coincide with the service technician inputting the communication status in order to determine the next step in the troubleshooting).

AAPA does not explicitly disclose performing a first set of actions when the status indicates valid upper-layer communication and performing a second set of actions when the status indicates invalid upper-layer communication. AAPA also does not disclose a transport layer communication status.

Armstrong discloses in fig. 5, that when the ADSL Modem Main Page 500 shows a "PPPoE Status: Connected" 518 (claimed status indicates valid upper-layer communication), that the subscriber can "Close Window" 512 and continue Internet browsing (claimed performing a first set of actions)(see para. 58). Armstrong further discloses in fig. 6, Setup 610 which includes inputting Username 612 and Password 614 (claimed performing a second set of actions) in order to "Connect" 616 and "wait for the PPPoE light on the modem to turn solid green" (claimed when the status indicates invalid upper-layer communication and CPE is a transceiver)(see para. 59). **Note** that the ADSL modem of Armstrong has a visual indicator that turns solid green when the PPPoE status is "connected," thus, both AAPA and Armstrong discloses a visual indicator that is observable by the end user as claimed and in particular Armstrong discloses that the CPE is a modem/transceiver as required in claims 2 and 9.

Tsang discloses a UDP header 420 and status indicator 440 (claimed transport layer communication status; para. 31, *The status indicator 440 provides a status*

Art Unit: 2465

indication). Note that UDP (User Datagram Protocol) is a well-known transport layer protocol.

It would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention was made to modify the troubleshooting method of AAPA to provide two sets of actions to be performed upon a visual inspection of upper-level communication status in a CPE such as a modem/transceiver as taught by Armstrong, wherein the upper-level communication status indicates a transport layer communication status using UDP and status indicator as taught by Tsang. One skilled in the art would have been motivated to make the combination to trouble-shoot a DSL connection depending on communication status with the assistance of the customer using a user-friendly light (see Armstrong fig. 6 and Abstract) using a UDP and status indicator because UDP is a simple standard transmission protocol.

Regarding claims 7 and 8,

AAPA discloses that when problems arise, trouble shooting typically involves the access provider sending a technician to a customer premise (see Applicant's spec, pg. 2, para. 1005).

Regarding claim 11,

AAPA shows in fig. 1, DSLAM 110.

Regarding claim 12,

AAPA discloses that LEDs provide low-level connection status (see Applicant's spec, pg. 2, para. 1006).

Regarding claims 13-15,

AAPA shows in fig. 5 various LEDs, all of which are admitted prior art, except PPPoE.

Response to Arguments

5. Applicant's arguments filed 7/30/2009 have been fully considered but they are not persuasive.

- Applicant's argues on pg. 5 of Remarks regarding claims 1, 2, 6-9, and 11-16, that the claims have been amended to recite a transport layer communication status indication. Thus, the applicant contends that the claims are now allowable.
- The examiner respectfully disagrees. As explained above in the rejection to claims 1, 2, 6-9, and 11-16, The specification does not provide any description of the emphasized limitations above in the rejection to the claims. The specification provides an enabling disclosure for only a layer 3 indicator, specifically a PPPoE indicator. The applicant has amended the claims to particularly recite an indicator indicating a transport layer communication status. The only mention of transport layer is in reference to figure 2; however, the description is only describing a well-known

International Standards Organization (ISO) standard's model, consisting of seven layers (see Specification, para. [1019]). It does not describe a transport layer communication status indicator. The specification broadly describes an "upper-layer indicator" in reference to fig. 4. Again, however, there is no mention of a transport layer communication status indicator, only a layer 3 indicator, specifically a PPPoE indicator (see Specification, para. [1036]). And since the applicant has amended the claims to recite a "upper layer communication indicator indicating a transport layer communication status" to particularly distinguish from the prior art cited by the examiner (i.e., Armstrong, US 2003/0231206, in the Office action mailed 12/3/2008), an enabling disclosure describing a transport layer communication status indicator is clearly necessary as required by 35 U.S.C. 112, first paragraph. Therefore, the examiner maintains the 35 U.S.C. 112, first paragraph rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANTHONY SOL whose telephone number is (571)272-5949. The examiner can normally be reached on M-F 7:30am - 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2465

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/A. S./
Examiner, Art Unit 2465
11/25/2009

/Jayanti K. Patel/
Supervisory Patent Examiner, Art Unit 2465